

**Nevada Division of Environmental Protection
Bureau of Water Quality Planning**

Proposed Revisions to the Walker River Water Quality Standards

FACT SHEET

December, 1999

Background

Section 303 of the Clean Water Act and 40 CFR 131 give states responsibility for setting, reviewing and revising water quality standards. State of Nevada requirements are contained in the Nevada Revised Statutes 445A.425 and 445A.565 and water quality standards for waters of Nevada are found in the Nevada Administrative Code (NAC) 445A.119 through 445A. 225. To set water quality standards, water bodies are divided into **reaches** based on land uses and physical and chemical characteristics. **Beneficial uses** for each reach are designated and criteria (or beneficial use standards) to protect those uses are established. **Beneficial Use Standards (BUSs)** are usually derived from USEPA national guidance criteria. If the existing water quality is significantly better than the BUS, **requirements to maintain existing higher quality (RMHQs)** may be established in addition to the BUS. Workshops are held to obtain comments on proposed water quality standards from federal, state and local agencies and the general public. After consideration of the public comments, the standards are presented at a public hearing to the State Environmental Commission (SEC) for review and adoption. Standards adopted by the SEC are then subject to approval by the USEPA.

The **existing reaches** for the Walker River include:

- NAC 445A.160 -- West Walker River at state line.

- NAC 445A.161 -- Topaz Lake.
- NAC 445A.162 -- West Walker River near Wellington to the West Walker River at state line.
- NAC 445A.163 -- W. Walker above confluence with E. Walker at Nordyke Road to Wellington.
- NAC 445A.164 -- Sweetwater Creek.
- NAC 445A.165 -- East Walker River at state line.
- NAC 445A.166 -- East Walker River above the confluence with the West Walker River to the state line.
- NAC 445A.167 -- Walker River at inlet to Weber Reservoir to the confluence of the E. and W. Forks.
- NAC 445A.168 -- Walker River at the inlet to Walker Lake to Weber Reservoir.
- NAC 445A.169 -- Desert Creek.

The existing **beneficial uses** include irrigation, watering of livestock, recreation involving contact with the water, recreation not involving contact with the water, industrial supply, municipal and/or domestic water supply, propagation of wildlife; and propagation of aquatic life, with the species of major concern:

- NAC 445A.160 -- rainbow trout and brown trout.
- NAC 445A.161 -- rainbow trout, cutthroat trout, brown trout, kokone salmon and silver salmon.
- NAC 445A.162 -- rainbow trout and brown trout.
- NAC 445A.163 -- rainbow trout and brown trout.
- NAC 445A.164 -- brown trout, brook trout and rainbow trout.
- NAC 445A.165 -- mountain whitefish, rainbow trout and brown trout.
- NAC 445A.166 -- brown trout and rainbow trout.
- NAC 445A.167 -- channel catfish and largemouth bass.

- NAC 445A.168 -- channel catfish, largemouth bass, adult Lahontan cutthroat trout from April through May, and adult rainbow trout from April through June.
- NAC 445A.169 -- brown trout, brook trout and rainbow trout.

Summary of proposed revisions

1) Reaches:

1a) It is proposed that the reach known as East Walker River south of Yerington (NAC 445A.166) be divided into two reaches: (1) East Walker River at Raccoon Beach; and (2) East Walker River south of Yerington. The beneficial use standards currently established for East Walker River at state line (NAC 445A.165) are proposed for the new reach East Walker River at Raccoon Beach. Mountain whitefish, rainbow trout and brown trout are the fish species to be protected in the reach East Walker River at Raccoon Beach.

2) Beneficial Uses:

2a) It is proposed to include mountain whitefish as a species of major concern as listed in NAC 445A.159 (Beneficial Uses for the Walker River) for the reaches West Walker River at state line (NAC 445A.160), West Walker River near Wellington (NAC 445A.162), and Sweetwater Creek (NAC 445A.164), based on recommendation from the Nevada Division of Wildlife (NDOW).

2b) It is proposed to revise the time period that adult Lahontan cutthroat trout may be present in the reach from Walker Lake to Weber Reservoir (Walker River at Schurz Bridge, NAC 445A.168) as stated in NAC 445A.159(8i) (Beneficial Uses for the Walker River) from April through May to March through May, based on the recommendation of NDOW.

2c) It is proposed to add the wording “depending on hydrological conditions” to NAC 445A.159(8i) (Beneficial Uses for the Walker River) for the time period that adult Lahontan cutthroat and rainbow trout may be found in the reach Walker River at Schurz Bridge (NAC 445A.168), for clarification and consistency with the standards for other rivers in Nevada.

2d) It is proposed to list municipal and domestic water supply as the most restrictive beneficial use protected by the color parameter for all reaches (NAC 445A.160-169) for consistency with the color standard for other rivers in Nevada. A color numeric beneficial use standard (BUS) for the protection of this use is proposed (see number 9 below).

3) Temperature:

3a) It is proposed to add a footnote specifying a temperature BUS of $\leq 21^{\circ}\text{C}$ during April and May when adequate flows exist to allow the passage of Lahontan cutthroat trout from Walker Lake to the Walker River for the reach Walker River at Schurz Bridge (NAC 445A.168), based on the recommendation of NDOW.

3b) It is proposed to add a footnote specifying a temperature BUS of $\leq 21^{\circ}\text{C}$ during April and May when adequate flows exist to allow the passage of Lahontan cutthroat trout from Walker Lake to the river for the reach Walker River at inlet to Weber Reservoir (NAC 445A.167), based on the request from the Walker River Paiute Tribe in order to meet the downstream use as described in proposed revision number 3a.

3c) It is proposed to revise the April-June temperature BUS from $\leq 24^{\circ}\text{C}$ to $\leq 23^{\circ}\text{C}$ for the reach Walker River at inlet to Weber Reservoir (NAC 445A.167) for consistency with NAC 445A.168, based on the recommendation of NDOW.

4) pH:

4a) It is proposed to revise the pH BUS from the range of 7.0 - 8.3 SU to the range of 6.5 - 9.0 SU for all reaches (NAC 445A.160-169) for consistency with current criteria recommended by the USEPA for the protection of aquatic life.

5) Total Phosphates:

5a) It is proposed to revise the parameter total phosphates to total phosphorus for all reaches (NAC 445A.160-169) for consistency with current USEPA criteria. This is a change in terminology only; no revisions to the existing phosphorus beneficial use standards or RMHQs are proposed.

6) Nitrite:

6a) It is proposed to revise the nitrite BUS from ≤ 5.0 mg/l to ≤ 1.0 mg/l for the reach Walker River at the inlet to Weber Reservoir (NAC 445A.167) for consistency with current USEPA criteria for the protection of municipal and domestic drinking water supply.

6b) It is proposed to add a footnote specifying a nitrite BUS of ≤ 0.06 mg/l during March through May when adequate flows exist to allow the passage of Lahontan cutthroat trout from Walker Lake to the river for the reaches Walker River at the inlet to Weber Reservoir (NAC 445A.167) and Walker River at Schurz Bridge (NAC 445A.168), to protect the use as described in proposed revision numbers 3a-b, and for consistency with the nitrite BUS for other reaches where coldwater fish may exist.

7) Ammonia:

7a) It is proposed to replace the existing un-ionized ammonia beneficial use standards with standards for total ammonia for all reaches (NAC 445A.160-169), for consistency with current USEPA criteria for the protection of fish.

8) Dissolved Oxygen:

8a) It is proposed to revise the effective time period for the dissolved oxygen beneficial use standard of ≥ 6.0 mg/l from November through April to November through May for the reaches West Walker River at state line (NAC 445A.160), Topaz Lake (NAC 445A.161) and Walker River at Schurz Bridge (NAC 445A.168) based on the recommendation of NDOW, and for consistency with the dissolved oxygen standard for other reaches of the Walker River.

9) Color:

9a) It is proposed to replace the existing narrative color beneficial use standard which states "Increase in color must not be more than 10 platinum cobalt units (PCU) above natural conditions." with a specific numeric criteria of ≤ 75 PCU for all reaches (NAC 445A.160-169), based on USEPA criteria for the protection of municipal and domestic water supply and for consistency with the color standard for other rivers in Nevada.

9b) It is proposed to establish the following color RMHQs, based on existing data:

West Walker River at the state line (NAC 445A.160)-- ≤ 26 PCU

Topaz Lake (NAC 445A. 161)-- ≤ 21 PCU

West Walker River at Nordyke Road (NAC 445A.163)-- ≤ 46 PCU

10) Sulfate:

10a) It is proposed to establish the following sulfate RMHQs, based on existing data:

West Walker River at state line (NAC 445A.160)-- ≤ 25 mg/l

Topaz Lake (NAC 445A.161)-- ≤ 25 mg/l

West Walker River at Nordyke Road (NAC 445A.163)-- ≤ 74 mg/l

East Walker River at state line (NAC 445A.165)-- ≤ 26 mg/l

East Walker River south of Yerington (NAC 445A.166)-- ≤ 44 mg/l

11) Bacteria:

11a) It is proposed to replace the existing fecal coliform BUS which states “Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.” with the following BUS for *Escherichia coli* bacteria for all reaches (NAC 445A.160-169), for consistency with current USEPA criteria for the protection of recreation involving contact with the water:

Annual Geometric Mean-- ≤ 126 per 100 ml

Single Sample Maximum-- ≤ 235 per 100 ml

Public Workshops:

Thursday, January 20, 2000

Lyon County Library

20 Nevin Way

Yerington, Nevada

1:00 to 3:00 pm

Thursday, January 20, 2000
Mineral County Library
1st and A
Hawthorne, Nevada
7:00 to 9:00 pm

For questions, comments or additional information please contact:

Adele Basham
Telephone: (775) 687-4670 ext. 3102
or
Kathy Sertic
Telephone: (775) 687-4670 ext. 3101

NV Division of Environmental Protection
Bureau of Water Quality Planning
333 W. Nye Lane
Carson City, Nevada 89706

FAX: (775) 687-6396